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Edwards historic rocket test stand rededicated

by Ranney Adams, Propulsion Directorate

EDWARDS AIR FORCE BASE, Calif. — One of the Air Force Research Laboratory's largest and most historic rocket test stands at Edwards Air Force Base was rededicated with a ribbon cutting on Jan. 31.

The 15 story-high Test Stand 1-D, overlooking the dry lakebed at Edwards, towered over the crowd of attendees. Dignitaries, engineers, technicians and suppliers gathered along with rocket industry leaders from Aerojet and Boeing Rocketdyne to mark the completion of the 1-1/2 year modernization effort.

"This is something we've been waiting on for a long time. This facility represents history," said Col. Joe Boyle, Site Commander. "And now it is ready for the future."

The liquid oxygen and kerosene-based test stand is now considered state-of—the-art and capable of testing rocket engines and components with millions of pounds of thrust. Originally built as an Apollo era F-1 rocket engine test facility, it was taken from storage in the desert climate and modernized to increase national rocket engine test and research capabilities. The modernization cost was approximately \$12 million. Estimates to build a new test stand from scratch were in the neighborhood of \$500 million.

The foresight and support of California's state and federal legislative officials, with the assistance of the California Space Authority and others, helped enable the funding of the project for the Air Force according to Sverdrup Technology, the prime contractor, and their management-consulting firm, Booz Allen Hamilton.

The test stand's capabilities fits into the overall DoD national rocket propulsion program called Integrated High Payoff Rocket Propulsion Technology (IHPRPT) that is coordinated by AFRL. The program's future rocket propulsion demonstrations can now utilize the stand's massive thrust capabilities. IHPRPT's DoD/NASA/and industry partnership is working towards a national



EDWARDS AIR FORCE BASE, Calif. — Located at Edwards Research Site, Test Stand 1-D is part of facilities that have provided the nation with rocket propulsion research, development and test capabilities for almost 50 years (Air Force photo).

doubling of propulsion capability. That means more thrust, fewer parts, improved manufacturing and innovative materials application. IHPRPT encompasses liquid rocket engine, solid rocket motor, and advanced propulsion technologies.

The stand is part of the laboratory's nearly \$3 billion worth of facilities at Edwards. Giving the nation rocket propulsion research, development and test capabilities for over 50 years, nearly every American rocket can trace its research and testing to this facility. @